

APPLICANT(S): EITAN, Boaz
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AMENDMENTS TO THE CLAIMS

Please add or amend the claims to read as follows, and cancel without prejudice or disclaimer to resubmission in a divisional or continuation application claims indicated as cancelled:

1. (Previously presented) A method of fabricating an oxide-nitride-oxide (ONO) layer in a memory cell, said method comprising:

forming a bottom oxide layer on a substrate;

depositing a nitride layer; and

oxidizing a top oxide layer, thereby causing oxygen to be introduced into substantially all of said nitride layer within said memory cell, so as to restrict lateral movement of charge within said nitride layer.

2.-3. (Cancelled)

4. (Previously presented) A method for improving the charge retention in a nitride layer of a memory cell, said method comprising:

depositing a nitride layer; and

introducing oxygen into substantially all of said nitride layer within said memory cell, so as to restrict lateral movement of charge within said nitride layer.

5. (Previously presented) A method for improving the charge retention in a nitride layer of a memory cell, said method comprising:

depositing a nitride layer;

controlling the thickness of said deposited nitride layer; and

introducing oxygen into substantially all of said nitride layer within said memory cell, so as to restrict lateral movement of charge within said nitride layer.

6. (Cancelled)

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7. (Previously presented) A method of manufacturing a programmable, read only memory device, the method comprising:

forming a first oxide layer on a substrate,

forming a nitride layer on top of said oxide layer, wherein said nitride layer is 150 angstroms or less thick;

introducing oxygen into substantially all of said nitride layer within a memory cell during formation of a second oxide layer on top of said nitride layer, so as restrict lateral movement of charge within said nitride layer;

patterning said oxide-nitride-oxide (ONO) layers into desired patterns; and

forming a gate layer over said patterned ONO layer.

8. (Previously presented) A method according to claim 7 and wherein said first oxide layer is approximately 50 – 150 angstroms thick.

9. (Previously presented) A method according to claim 7 and wherein said first oxide layer is approximately 80 angstroms thick.

10. (Previously presented) A method according to claim 7 and wherein said nitride layer is approximately 20 – 150 angstroms thick.

11. (Previously presented) A method according to claim 7 and wherein said second oxide layer is approximately 50 - 150 angstroms thick.

12. (Previously presented) A method according to claim 7 and wherein said forming said second oxide layer comprises consuming a portion of said nitride layer.

13. (Cancelled)